

**Appendix Table 1:
Full Regression Results for Fourier Series Model in Table 3B**

	Non-Linear in Total Expenditure			Non-Linear in Collection Time		
	I	III	IV	I	III	IV
FUG in Ward	-16.52 ** (3.35)	-12.99 ** (3.30)	-12.48 ** (3.27)	-16.61 ** (3.38)	-12.92 ** (3.34)	-11.89 ** (3.31)
<u>Household Characteristics</u>						
Tot Exp Per Cap				0.68 (0.45)	1.33 ** (0.44)	1.89 ** (0.46)
Owns Agr Land		-22.20 ** (7.31)	-13.63 * (7.37)		-23.23 ** (7.35)	-14.32 * (7.43)
Has Kitchen Garden		-13.35 ** (4.43)	-13.08 ** (4.44)		-10.64 ** (4.46)	-11.60 ** (4.47)
Buddhist		13.27 ** (4.66)	16.43 ** (4.78)		13.32 ** (4.67)	17.70 ** (4.81)
Household Size	7.98 ** (0.65)	8.15 ** (0.65)	8.12 ** (0.64)	7.67 ** (0.65)	7.75 ** (0.65)	7.87 ** (0.64)
Bonded Walls		-9.06 ** (4.11)	-8.63 ** (4.14)		-6.66 (4.11)	-7.80 * (4.15)
Bazaar 1 to 2 hours away		21.43 ** (3.85)	20.44 ** (3.81)		20.92 ** (3.88)	19.78 ** (3.83)
Bazaar 2 to 4 hours		17.27 ** (4.03)	15.78 ** (3.97)		17.04 ** (4.07)	15.18 ** (4.00)
Bazaar >4 hours		26.31 ** (5.06)	24.91 ** (5.04)		26.10 ** (5.09)	24.21 ** (5.07)
Paved Road > 2 hours		36.94 ** (10.92)	39.93 ** (11.13)		35.53 ** (10.99)	38.59 ** (11.19)
Piped Water in House		-7.96 ** (3.07)	-4.84 (3.10)		-7.20 ** (3.11)	-4.21 (3.14)
Uses Open Stove			7.50 ** (3.26)			9.09 ** (3.28)
Purchases Kerosene			-17.04 ** (5.69)			-17.29 ** (5.73)
Time to Collect 1 Bhari	1.42 * (0.75)	1.40 * (0.73)	1.40 * (0.74)			
<u>Ward Characteristics</u>						
Electricity in Ward		-6.77 (4.85)	-4.69 (5.12)		-8.33 * (4.89)	-6.14 (5.16)
Makalu-Barun Ward		15.46 ** (6.29)	12.14 * (6.36)		16.37 ** (6.36)	13.33 ** (6.43)
Alternative Fuel in Ward			-28.47 ** (8.25)			-30.59 ** (8.31)
<u>VDC Characteristics</u>						
Forest Area in VDC			0.33 ** (0.11)			0.34 ** (0.11)
Tropical Mixed Hardwood Forest			6.96 (4.40)			6.76 (4.44)
Forest w/ Dense Crown			0.72 (4.63)			-0.10 (4.66)
Barren Forest			-7.74 ** (3.87)			-7.43 * (3.91)
Latitude	2.40 ** (0.17)	1.51 ** (0.20)	1.40 ** (0.24)	2.41 ** (0.17)	1.54 ** (0.21)	1.36 ** (0.24)

* is significant at 10%. ** is significant at 5%. A constant and month effects are also included in each regression.

Heteroskedasticity corrected standard errors in parenthesis. Standard errors (in this table) have not been corrected for the series expansion in the nonlinear variable. 1200 observations in columns I and III; 1188 observations in columns IV.

**Appendix Table 2:
Full Regression Results for First Differencing Model in Table 3B**

	Non-Linear in Total Expenditure			Non-Linear in Collection Time		
	I	III	IV	I	III	IV
FUG in Ward	-15.92 ** (3.38)	-11.56 ** (3.37)	-11.57 ** (3.36)	-18.13 ** (3.24)	-14.47 ** (3.17)	-17.76 ** (3.19)
<u>Household Characteristics</u>						
Tot Exp Per Cap				0.74 * (0.43)	1.79 ** (0.43)	1.73 ** (0.43)
Owns Agr Land		-21.15 ** (7.62)	-10.69 (7.68)		-22.87 ** (7.00)	-10.96 (6.91)
Has Kitchen Garden		-9.96 ** (4.59)	-12.26 ** (4.65)		-14.03 ** (4.29)	-13.61 ** (4.29)
Buddhist		16.56 ** (4.69)	19.85 ** (4.81)		16.35 ** (4.37)	14.13 ** (4.63)
Household Size	7.48 ** (0.67)	7.79 ** (0.67)	7.88 ** (0.67)	7.67 ** (0.62)	7.48 ** (0.62)	7.73 ** (0.60)
Bonded Walls		-5.59 (4.21)	-5.91 (4.25)		-4.67 (4.01)	-3.83 (4.02)
Bazaar 1 to 2 hours away		16.68 ** (3.92)	16.25 ** (3.92)		20.95 ** (3.76)	18.16 ** (3.68)
Bazaar 2 to 4 hours		16.04 ** (4.19)	13.91 ** (4.16)		19.56 ** (3.97)	13.55 ** (3.88)
Bazaar >4 hours		27.83 ** (5.24)	25.35 ** (5.25)		30.18 ** (5.09)	22.00 ** (4.92)
Paved Road > 2 hours		29.59 ** (11.20)	32.42 ** (11.28)		32.33 ** (10.83)	30.60 ** (10.89)
Piped Water in House		-7.57 ** (3.12)	-4.00 (3.19)		-5.26 * (3.07)	-3.14 (3.04)
Uses Open Stove			9.16 ** (3.33)			6.94 ** (3.07)
Purchases Kerosene			-13.85 ** (5.92)			-20.80 ** (5.46)
Time to Collect 1 Bhari	0.98 (0.75)	1.00 (0.74)	0.89 (0.75)			
<u>Ward Characteristics</u>						
Electricity in Ward		-6.80 (5.04)	-3.37 (5.45)		-3.75 (4.88)	-3.15 (5.08)
Makalu-Barun Ward		14.54 ** (6.42)	10.43 (6.53)		4.05 (6.22)	5.01 (6.23)
Alternative Fuel in Ward			-33.78 ** (8.48)			-36.85 ** (7.99)
<u>VDC Characteristics</u>						
Forest Area in VDC			0.31 ** (0.12)			0.51 ** (0.11)
Tropical Mixed Hardwood Forest			7.50 * (4.53)			10.15 ** (4.39)
Forest w/ Dense Crown			-4.99 (4.92)			4.08 (4.49)
Barren Forest			-5.01 (3.96)			-9.18 ** (3.84)
Latitude	2.40 ** (0.18)	1.59 ** (0.21)	1.55 ** (0.25)	2.24 ** (0.17)	1.46 ** (0.21)	1.39 ** (0.23)

* is significant at 10%. ** is significant at 5%. A constant and month effects are included in each regression.

Heteroskedasticity corrected standard errors in parenthesis. Standard errors (in this table) have not been corrected for the first differencing of the nonlinear variable. 1200 observations in columns I and III; 1188 observations in columns IV.

**Appendix Table 3:
Full Regression Results for Omitted Variable Strategies**

	Switching Communities	<u>Endogenous Programs</u>	
		First Stage	Equation 4
FUG in Ward			-44.86 ** (15.93)
FUG in t-1	-33.58 ** (10.08)		
FUG in t-2	-25.09 ** (9.64)		
No FUG	-11.81 (9.92)		
<u>Controls</u>			
Tot Exp Per Cap	0.48 (0.60)	0.01 ** (0.00)	0.83 (0.60)
Household Size	7.50 ** (0.66)	0.00 (0.01)	7.54 ** (0.66)
Time to Collect 1 Bhari	1.54 * (0.83)	-0.02 ** (0.01)	0.92 (0.88)
Latitude	2.33 ** (0.19)	0.00 (0.00)	2.43 ** (0.19)
<u>Instruments</u>			
Other User Group in Ward		0.00 (0.03)	
Agr Tech Assistance in Ward		0.24 ** (0.03)	
Range Post in VDC		-0.02 (0.03)	
N	1200	1200	1200
Adjusted R2	0.242	0.190	0.195

* is significant at 10%. ** is significant at 5%. Heteroskedasticity corrected standard errors in parenthesis. All regressions also include a constant and vector of month effects. Column 1 corresponds to the switching communities regressions from equation 7 and reported in the second row of table 4. The dependent variable is bharis collected. The omitted category is communities that receive a FUG after the household survey. Column 2 is the first stage regression used in column 3. The dependent variable is an indicator for whether or not there is a FUG present in the ward. Column 3 is the structural equation from the two-stage least squares estimates of equation 4. The dependent variable is bharis collected.